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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C.

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ONE FINANCIAL CENTER

BOSTON, MA 02111

EXAMINER

HOANG, HIEU T

ART UNIT

PAPER NUMBER

2152

MAIL DATE

DELIVERY MODE

03/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/665,979

Applicant(s)

SURMA ET AL.

Examiner

HIEU T. HOANG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the communication filed on 02/13/2008.
2. Claims 1-18 are pending and presented for examination.

Response to Amendment

3. The objection of claims 12, 13, 14, 17 has been withdrawn due to the amendment.

Response to Arguments

4. Applicant's arguments with respect to the rejection(s) of claim(s) 1-10 have been fully considered but are moot in view of new ground(s) of rejections.
5. Applicant's arguments with respect to the rejection(s) of claim(s) 11-18 have been fully considered but are unpersuasive.
6. Arguments wherein "wrapping" is different from "prefixing" a message are unpersuasive. Given broadest reasonable interpretation, "wrapping" is any form of encapsulating or prefixing or concatenating... to a message.
7. Arguments that the prior art does not teach "wrapping the message in a markup language file envelope, when the sending and receiving application have the same message format and when the sending and receiving application have different message formats converting the message format of the received message before transmission to the receiving application" using the traversal to the rejection of claim 1, are also unpersuasive. Refer to the rationale in Claim Objections section below and new claim rejection mapping in the U.S.C. 103 rejection section below.

8. Arguments that prior art Eisenhauer teaches away from using a markup language is unpersuasive. There is no disclosure, teachings and/or suggestions in Eisenhauer that would enable one of ordinary skilled in the art to conclude that Eisenhauer avoids wrapping the message in an XML envelope, since wrapping a message is just encapsulating or prefixing or concatenating to a message and XML is a well known markup language. Stated another way, Eisenhauer does not criticize, discredit, or other wise discourage the usage of redirection. See *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004) [However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...."]. Also, the applicants misinterpret Eisenhauer's disclosure. In the cited section of Eisenhauer in the Remarks (p. 4 second par.), Eisenhauer talks about disadvantages of converting (encoding and decoding) to XML, and never mentions any disadvantage of wrapping or wrapping in a XML envelope.

Claim Objections

9. Claims 1-18 are objected to because of the following informalities: The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Consider claim 1, the claim recites "wrapping the message in a markup language file envelope, when the sending and receiving application have the same message format and when the sending and receiving

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application have different message formats converting the message format of the received message before transmission to the receiving application". Lack of necessary punctuation in the limitation renders the claim extremely vague and indefinite, because multiple meanings can be interpreted from the limitation. For example, first, it can mean "(wrapping the message in a markup language file envelope, when the sending and receiving application have the same message format) and (when the sending and receiving application have different message formats converting the message format of the received message before transmission to the receiving application)." Second, it can mean "wrapping the message in a markup language file envelope, ((when the sending and receiving application have the same message format and when the sending and receiving application have different message formats converting the message), format of the received message before transmission to the receiving application)." And third, it can mean "(wrapping the message in a markup language file envelope, (when the sending and receiving application have the same message format and when the sending and receiving application have different message formats)) converting the message format of the received message before transmission to the receiving application" (Note that phrases in the parentheses are implemented first). Similar rationale applies to independent claims 7 and 11. Appropriate correction is required.

10. Claim 7 recites an "if" clause followed by a "when" clause, these are suggested to be amended to either ("if" and "if") or ("when" and "when") to make the claim clearer and more consistent.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, for the same rationale given in the Claim Objections above. For examining purpose, any broadest reasonable interpretation can be applied to the claims. For example, the previously discussed limitation of claim 1 will be read as "wrapping the message in a markup language file envelope, ((when the sending and receiving application have the same message format and when the sending and receiving application have different message formats converting the message), format of the received message before transmission to the receiving application)," meaning regardless of message formats, the system will wrap and convert the messages, which is well known in traditional application integration systems using XML.

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13. Claims 7-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite the phrases "substantially identical" and "substantially different." Given that "substantially" is a relative term, "identical" means "exactly same". The claims are vague and indefinite by what the applicants mean "substantially identical" and "substantially different." Removing the word "substantially" is suggested as an amendment.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eisenhauer et al. (Native Data Representation: an Efficient Wire Format for High Performance Computing, hereafter Eisenhauer), in view of Erickson et al. (US 6,851,089, hereafter Erickson), further in view of Schroeder et al. (US 2002/0099735, hereafter Schroeder)

16. For claim 1, Eisenhauer disclose in an application integration system that communicates messages between applications, a computer-implemented method for

transmitting electronic messages that preserves a message format native to both a sending application and at least one receiving application, the method comprising:

receiving a message from the sending application, the message having a message format used by the sending application (3.1.1 lines 1-4, sending message with a format);

wrapping the message in an envelope (3.1.1 lines 1-4, marshalling is to prefix or wrap the message with a format token);

routing the envelope with the message through the application integration system (3.1.1, last sentence, send out the marshaled file to the receiving side);

unwrapping the message from the envelope (3.1.2, unmarshalling); and

transmitting the message according to the message format to the receiving application (3.1.2, par.1 last sentence, section 1, par. 4, unmarshalling without converting in homogeneous data format exchange).

Eisenhauer does not disclose: the envelope is a markup language file envelope;

However, Erickson discloses the same (abstract, col. 25 line 57-col. 26 line 15, common file format XML, XML wrapper creation and reproduction)

Eisenhauer-Erickson does not explicitly disclose:

when the sending and receiving application have the same message format and when the sending and receiving application have different message formats converting the message format of the received message before transmission to the receiving application.

However, Schroeder discloses when the sending and receiving application have the same message format and when the sending and receiving application have different message formats converting the message format of the received message before transmission to the receiving application ("when the sending and receiving application have the same message format and when the sending and receiving application have different message formats" is given no weight since it means "always," fig. 4, mapping and normalizing inbound data (from a sending application) to XML format before sending the data to a receiving application)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Eisenhauer and Erickson Schroeder and to provide a mechanism for storing and retrieving a wrapper for subsequent use by using XML wrapper serialization technique (Erickson, abstract)

17. For claim 2, the claim is rejected as in claim 1. Eisenhauer-Erickson-Schroeder further discloses the markup language corresponds to the extensible markup language (XML) (Erickson, col. 25 line 57-col. 26 line 15, XML), and wherein the routing further comprises routing, at the application integration system, the markup language file envelope without mapping and converting the message (Eisenhauer, 3.1.1 lines 1-4, marshalling is to prefix or wrap the message with a format token, no converting).

18. For claim 3, the claim is rejected as in claim 2. Eisenhauer-Erickson-Schroeder further discloses the message includes one or more data objects, and wherein wrapping

the message in a markup language file envelope includes serializing one or more data objects to form an XML file (Erickson, col. 25 line 57-col. 26 line 15, serialization).

19. For claim 4, the claim is rejected as in claim 3. Eisenhauer-Erickson-Schroeder further discloses unwrapping the message from the markup language file envelope includes deserializing the one or more data objects (Erickson, col. 25 line 57-col. 26 line 15, serialization reproduction).

20. For claim 5, the claim is rejected as in claim 1. Eisenhauer-Erickson-Schroeder further discloses the message format is an Idoc message format (Schroeder, fig. 7a, Idoc message format).

21. For claim 6, the claim is rejected as in claim 1. Eisenhauer-Erickson-Schroeder further discloses storing a copy of the message (Eisenhauer, 3.2.2, fig. 3, 4, caches).

22. For claim 7, Eisenhauer discloses a computer-implemented method for transmitting a message from a sending application through an application integration system, the method comprising:

determining a receiving application of the message; determining a file format used by the receiving application (3.2.2, file format caches for storing file format of sending and receiving application);

if the file format used by the receiving application is substantially identical to a file format used by the sending application (3.1.2, par.1 last sentence, section 1, par. 4, unmarshalling without converting in homogeneous data format exchange), wrapping the message in a file envelope and when the sending and receiving applications have substantially different file formats (3.1.1 lines 1-4, marshalling is to prefix the message with a format token without converting to XML);

routing the file envelope with the message to the receiving application (3.1.1, last sentence, send out the marshaled file to the receiving side).

Eisenhauer does not disclose the envelope is a markup language file envelope;

However, Erickson discloses the same (abstract, col. 25 line 57-col. 26 line 15, common file format XML wrapper)

Eisenhauer-Erickson does not explicitly disclose the wrapping step is in response to the condition of the file format used by the receiving application is substantially identical to a file format used by the sending application;

However, Eisenhauer discloses that if the file format used by the receiving application is substantially identical to a file format used by the sending application, the receiving end uses the wrapped file from the envelope without converting to the receiving end file format (3.1.2, par.1 last sentence, section 1, par. 4).

Eisenhauer-Erickson does not explicitly disclose converting the format of the received message.

However, Schroeder discloses the same (fig. 4, mapping and normalizing inbound data (from a sending application) to XML format before sending the data to a receiving application)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Eisenhauer and Erickson and Schroeder to provide a mechanism for storing and retrieving a wrapper for subsequent use by using wrapper serialization (Erickson, abstract), and also checking for file format at the sender side instead of at the receiving end side to avoid high conversion overheads (Eisenhauer, 3.1.2, par.1 last sentence).

23. For claim 8, the claim is rejected as in claim 7. Eisenhauer-Erickson-Schroeder further discloses the markup language file envelope defines an XML envelope having as a payload one or more serialized data objects of the message (Erickson, col. 25 line 57- col. 26 line 15, XML serialized message wrapper).

24. For claim 9, the claim is rejected as in claim 7. Eisenhauer-Erickson-Schroeder further discloses determining a file format used by the receiving application further includes retrieving file format data from a directory (Eisenhauer, 3.2.2, format caches).

25. For claim 10, the claim is rejected as in claim 7. Eisenhauer-Erickson-Schroeder further discloses determining a receiving application of the message includes retrieving

receiving application data from a directory based on the content of the message (Eisenhauer, 3.2.2, format caches).

26. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder, in view of Eisenhauer, further in view of Erickson.

27. For claim 11, Schroeder discloses a system for communicating a message file from a sending application in a heterogeneous application network, comprising:

- an application integration system in communication with the sending application and one or more receiving applications, the application integration system (fig. 4, integration system is the intermediate system between the sender and the receiver) comprising:
- an inbound adapter connected with the sending application (fig. 4, inbound module), and
- converting the file format before transmission (fig. 4, converting to XML)

Schroeder does not disclose:

- configured to determine at least one receiving application for receiving the message, determine a file format used by the receiving application;
- if the file format used by the receiving application is substantially identical to a file format used by the sending application, wrap the message in a markup language file envelope according to a markup language format used by the application

integration system and if the sending and receiving applications have substantially different file formats.

However, Eisenhauer discloses:

- configured to determine at least one receiving application for receiving the message, determine a file format used by the receiving application (3.2.2, format cache, fig. 3, 4, receiving application format is identified)
- if the file format used by the receiving application is substantially identical to a file format used by the sending application and if the sending and receiving applications have substantially different file formats (3.2.2, using file format caches for checking file format of sending and receiving application), wrap the message in an envelope (3.1.1 lines 1-4, marshalling is to prefix the message with a format token);

Schroeder-Eisenhauer does not disclose the envelope is a markup language file envelope according to a markup language format used by the application integration system;

However, Erickson discloses the same (abstract, col. 25 line 57-col. 26 line 15, common file format XML wrapper), (also, Schroeder, XML integration system)

Schroeder-Eisenhauer-Erickson does not explicitly disclose the wrapping step is in response to the condition of the file format used by the receiving application is substantially identical to a file format used by the sending application;

However, Eisenhauer discloses that if the file format used by the receiving application is substantially identical to a file format used by the sending application, the

receiving end uses the wrapped file from the envelope without converting to the receiving end file format (3.1.2, par.1 last sentence, section 1, par. 4).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Eisenhower and Erickson to provide a mechanism for storing and retrieving a wrapper for subsequent use by using wrapper serialization (Erickson, abstract), and also checking for file format at the sender side instead of at the receiving end side to avoid high conversion overheads (Eisenhower, 3.1.2, par.1 last sentence).

28. For claim 12, the claim is rejected as in claim 11. Schroeder-Eisenhower-Erickson further discloses the adapter is further configured to send the open standard file to a message exchange infrastructure of the application integration system (Schroeder, fig. 4, a message exchange server using XML with inbound and outbound adapter)

29. For claim 13, the claim is rejected as in claim 12. Schroeder-Eisenhower-Erickson further discloses the exchange infrastructure includes a routing module for routing the open standard file from the sending application to at least one receiving application (Schroeder, fig. 4).

30. For claim 14, the claim is rejected as in claim 12. Schroeder-Eisenhower-Erickson further discloses the exchange infrastructure includes a mapping module for

providing read and write access to the one or more data objects in the open standard file (Schroeder, fig. 4, mapping).

31. For claim 15, the claim is rejected as in claim 11. Schroeder-Eisenhauer-Erickson further discloses the markup language file envelope includes an XML envelope (Erickson, abstract, col. 25 line 57-col. 26 line 15, common file format XML wrapper).

32. For claim 16, the claim is rejected as in claim 15. Schroeder-Eisenhauer-Erickson further discloses a payload of the XML envelope includes the one or more data objects related to the message (Erickson, abstract, col. 25 line 57-col. 26 line 15, serialization in a XML wrapper).

33. For claim 17, the claim is rejected as in claim 12. Schroeder-Eisenhauer-Erickson further discloses the exchange infrastructure includes an integration server hosting a runtime engine for routing the open standard file to the at least one receiving application determined by the adapter (Schroeder, fig. 4, integration server for routing XML messages to receiving application).

34. For claim 18, the claim is rejected as in claim 11. Schroeder-Eisenhauer-Erickson further discloses an outbound adapter connected with the receiving application, the outbound adapter configured to unwrap the message from the markup language file envelope to provide the message in the file format used by the receiving

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application (Eisenhauer, 3.1.2, par.1 last sentence, section 1, par. 4, unmarshalling at receiving application end in homogeneous case is just unwrapping the envelope).

Conclusion

35. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

/Bunjob Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2152